

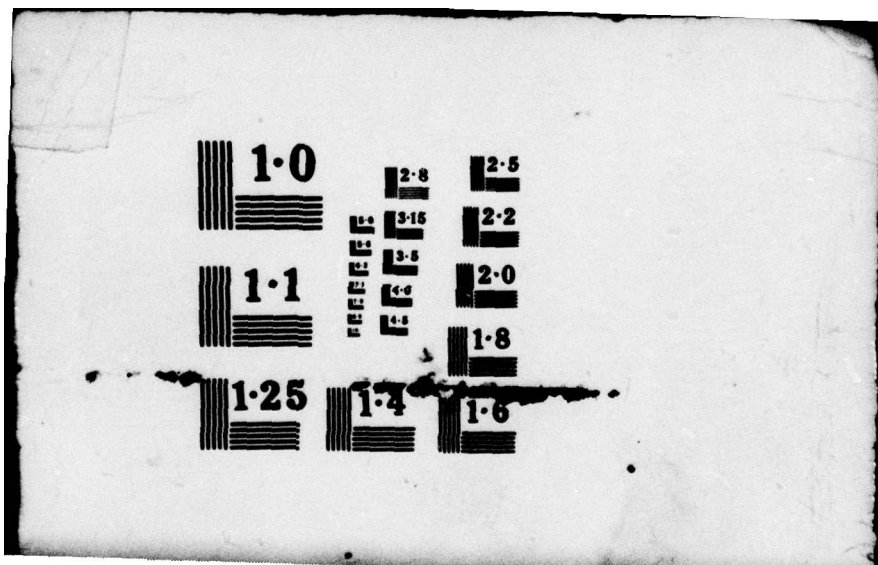
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AUG 79 F O DEPPNER, J J ANDERSON, W C SCULLY MDA903-78-C-0445
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Report 1070-05-79-CR

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Analysis to Determine Functional and Systems Requirements for an On-Line Structure and Composition System (SACS)

Report of Task F

LEVEL III

How Current and Developing Systems and Their Associated Management Procedures Should Support the Requirements of an On-Line SACS

A070449

By:

Francis O. Deppner
John J. Anderson
Whitney C. Scully

August 1979

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Submitted To:

Mr. Sam P. Hill
Force Accounting and Systems Division
Office of the Deputy Chief of Staff for Operations and Plans
Washington, D.C. 20310

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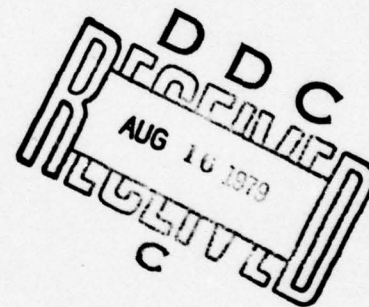
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Previous reports have identified all current and developing procedures that are either directly or indirectly involved in the SACS process. Those reports also pointed out how these systems/procedures did or did not support the on-line SACS. This report now delineates what modifications must be made to the current and developing systems/procedures, and identifies new requirements that must be fulfilled		

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Report of Task F - Determine How Current and Developing Systems and Their Associated Management Procedures Should Support the Requirements of an On-Line SACS

Block 20 (continued)

to make the on-line SACS effective, efficient, and responsive to the Army's needs.

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CONTENTS

SECTION	PAGE
ABBREVIATIONS AND ACRONYMS	iii
1 INTRODUCTION	1
1.1 Background	1
1.2 Research Methodology	1
1.3 Scope	2
1.4 Report Organization	2
2 OPERATIONAL CONCEPT FOR THE IMPROVED ON-LINE SACS	3
2.1 Concept	3
2.2 Data Sources	8
2.3 Data Timeliness and Accuracy	9
2.4 Improved On-Line SACS Logic Concept	10
3 REQUIRED SYSTEM AND PROCEDURAL CHANGES TO SUPPORT THE IMPROVED ON-LINE CONCEPT	13
3.1 General	13
3.2 Data Management	13
3.3 Developing Systems	14
3.4 Recommended Changes to Support the Improved On-Line SACS	14
APPENDIX	
A ASSUMPTIONS APPLICABLE TO THE IMPROVED ON-LINE SACS	A-1
B TIMELINESS REQUIREMENTS AND DEFINITIONS	B-1
C CURRENT FORDIMS AUTHORIZATIONS SUBSYSTEM REPORTS	C-1
D VFDMIS PLANNED IMPROVEMENTS	D-1

FIGURES

NUMBER		PAGE
2.1	Proposed Improved/On-Line SACS	5
3.1	Current Flow of TAADS Documents (MTOE and TDA)	29
3.2	Proposed Flow of TAADS Documents (MTOE and TDA)	30

ABBREVIATIONS AND ACRONYMS

AAO	Army Acquisition Objective
ACC	US Army Communications Command
ADCON	Army Deployment Control Code
ADP	Automated Data Processing
AESRS	Army Equipment Status Reporting System
AFP	Army Force Program
ALO	Authorized Level of Organization
AMSCO	Army Management Structure Code
AOC	Army Operations Center
ARLOC	Army Location Code
ARSTAF	Army Staff
AS	Authorization Subsystem
ASI	Additional Skill Indicator
AUDB	Authorizations Data Base
AURS	Automated Unit Reference Sheet
AUTS	Automated Update Transaction System
BIOMARS	Basis of Issue Monitoring and Recording Systems
BOIP	Basis of Issue Plan
Br	Branch
BRNCH	Branch
BY	Budget Year
CBS	Civilian Budgeting Ssystem
CCNUM	Command Control Number
CSM	Chief of Staff Memorandum
CCT	Consolidated Change Table
COMPO	Component Code
CONUS	Continental United States
CPU	Central Processing Unit
CSR	Chief of Staff Regulations
CY	Calendar Year
DA	Department of Army
DAMO-FDA	DCSOPS, Force Management, Force Accounting and Systems Division

DAMO-RQR	DCSOPS, Requirements, Requirement Programs and Priorities Division
DAMPL	Department of the Army Master Priority List
DAPE-MBA	DCSPER, Manpower, Plans and Budget, Allocation and Documentation Division
DAPPL	Department of the Army Planning Priority List
DARCOM	US Army Materiel Development and Readiness Command
DBMS	Data Base Management System
DCSLOG	Deputy Chief of Staff for Logistics
DCSOPS	Deputy Chief of Staff for Operations and Plans
DCSPER	Deputy Chief of Staff for Personnel
DCSRDA	Deputy Chief of Staff for Research, Development, and Acquisition
DEPLO	Deployment Location Code
DESCOM	US Army Depot System Command
DOCNO	Document Number
DPMNT	Deployment
DPI	Data Processing Installation
DPR	Data Processing Request
DPS	Decision Package Set
EARA	US Army Equipment Authorization Review Activity
EDATE	Effective Date
EQPF	Equipment Phasing File
ERC	Equipment Requirement Code
FAS	Force Accounting System
FDMIS	Force Development Management Information System
FICOD	Force Identification Code
FORDIMS	Force Development Integrated Management System
FSS	Force Structure Subsystem
FYDP	Five Year Defense Plan
Gd	Grade
GELOC	Geographic Location
GOCOM	General Officer Command
HQDA	Headquarters Department of Army
H-530	Equipment Validation Report (prepared at DESCOM from LOGSACS data)

ICP	Input Change Package
IIQ	Initial Issue Quantity
ITAADS	Installation TAADS
JCS	Joint Chiefs of Staff
LEA	US Army Logistics Evaluation Agency
LIC	Language Indicator Code
LIN/LINUM	Line Item Number
LOCCO	Location Code
LOG	Logistics
LOGSACS	Equipment (Logistics) Structure and Composition System
MACOM	Major Command
MARCM	Major US Army Reserve Command
MILID	Military Identity Aggregate
MILPERCEN	US Army Military Personnel Center
MIS	Management Information System
MOC	Management of Change
MOS/MOSCO	Military Occupational Specialty
MRC	US Army Materiel Readiness Command
MTOE	Modified Table(s) of Organization and Equipment
NATO	North Atlantic Treaty Organization
ODCSLOG	Office, Deputy Chief of Staff for Logistics
ODCSOPS	Office, Deputy Chief of Staff for Operations and Plans
ODCSPER	Office, Deputy Chief of Staff for Personnel
ODCSRDA	Office, Deputy Chief of Staff for Research, Development, and Acquisition
OPAGY	Operating Agency
OSD	Office of the Secretary of Defense
PAAS	Personnel Authorizations Analysis System
P/BS	Program/Budget Subsystem
PDM	Program Decision Memorandum
PEM	Phased Equipment Modernization
PER	Personnel
PERDIMS	Personnel Deployment and Distribution Management System
PERSACS	Personnel Structure and Composition System
POM	Program Objective Memorandum

POMCL	POMCUS ID for LIN
POMCUS	Prepositioning of Materiel Configured to Unit Sets
POMCU	POMCUS ID for Unit
PPBS	Planning, Programming, and Budgeting System
PROFA (FORFA)	Master Force
PY	Program Year
QQPRI	Qualitative and Quantitative Personnel Requirements Information
Qtr	Quarter
Qty	Quantity
RCOMD	Resource Command
RDAISA	US Army Research, Development, Acquisition Information Systems Agency
RDP	Required Deployment Data
REQVAL	Requisition Validation
ROBCO	Readiness Objective Code
ROMSR	Rounding by Most Significant Residuals
SACS	Structure and Composition System
SA	Semi-Annual
SAMPAM	System for Automation of Materiel Plans for Army Materiel
SB	Supply Bulletin (700-20)
SBCOM	Subcommand Code
SHN	Short Hand Notes
SIGMA	SACS Information Gathering and Management Analysis System
SISC	Security Investigation Status Code
SRC/SRCOD	Standard Requirements Code
SSN	Standard Study Number
STATS	Unit Status Code
SYCMACG	System Configuration Management and Control Group
TAA	Total Army Analysis
TAADS	The Army Authorization Documents System
TAEDP	Total Army Equipment Distribution Program
TC	Type Classification
TDA	Tables of Distribution and Allowances

TDATE	Termination Date
TL	Troop List
TLR/S	Total Logistic Readiness/Sustainability
TOE	Tables of Organization and Equipment
TRADOC	US Army Training and Doctrine Command
UICIO	UIC Information Officer
UIC/UICOD	Unit Identification Code
UIS	Unit Identification System
VFDMIS	Vertical Force Development Management Information System

SECTION 1
INTRODUCTION

1.1 BACKGROUND

This report covers Task F, "How Current and Developing Systems and Their Associated Management Procedures Should Support the Requirements of an On-Line SACS," of an ODCSOPS project entitled "Analysis to Determine Functional and Systems Requirements for an On-Line Structure and Composition System (SACS)," Contract Number MDA903-78-C-0445, dated 26 September 1978. Task F requires that a conceptual framework for on-line SACS operations be developed. The task objectives were to:

- Define the system concept for an improved on-line SACS.
- Specify modifications required in current and developing systems and their data elements to support the concept.
- Identify other requirements related to the defined SACS concept.

1.2 RESEARCH METHODOLOGY

The methodology employed was to relate the proposed SACS concept to the current and developing systems that either provide data to SACS or are planned to provide data to SACS in the future to determine:

- How these systems should support an improved on-line SACS.
- How their associated management procedures should support the improved on-line SACS.

The approach involved continued review of existing systems and user documentation, and discussions with system proponents and development personnel.

1.3 SCOPE

The scope of this task involved synthesis of previously proposed¹ changes to force structure and related systems into a viable concept that would be feasible for supporting the improved on-line SACS. Systems involved were the Force Development Integrated Management System (FORDIMS), the Vertical Force Development Management Information System (VFDNIS), the Table of Organization (TOE) file, the Basis of Issue Plan (BOIP) file, and the Short Hand Notes (SHN) file. Also considered was the Phased Equipment Modernization (PEM) program being developed at the US Army Depot Systems Command (DESCOM) for the purpose of obtaining an Equipment Phasing File (EQPF).

1.4 REPORT ORGANIZATION

Section 2 defines the operational concept of the improved on-line SACS. Section 3 defines changes, enhancements, and additions to current and developing systems necessary to implement the concept.

¹F. O. Deppner et al., Report of Task D - Data Requirements Document, General Research Corporation, 1070-03-79-CR, May 1979; F. O. Deppner et al., Report of Task E - Analysis of Current and Developing Systems Which Interface with LOGSACS and PERSACS to Determine to What Extent They Do or Do Not Support the Data Requirements of an On-Line SACS, General Research Corporation, 1070-04-79-CR, June 1979.

SECTION 2
OPERATIONAL CONCEPT FOR THE IMPROVED ON-LINE SACS

2.1 CONCEPT

The improved on-line SACS concept is based on the premise that feeder data will be accurate and timely in each respective feeder system; therefore, SACS data provided through the LOGSACS and PERSACS files to the ARSTAF and field activities will be accurate and timely. The concept assumes maximum use of interactive conversational software. Figure 2.1 is a general conceptual data-flow schematic which depicts the overview of the improved on-line SACS concept for both ODCSOPS and ODCSPER.

This concept requires terminals be installed in the ODCSOPS (SACS Branch) and in ODCSPER (as designated) to initiate the various processes necessary to develop the LOGSACS and PERSACS. All data inputs will be stored on line for immediate access, and all outputs will be stored on line for retrieval as required. The exceptions are the magnetic tape files that must be transported to different computer sites for processing.

The concept will utilize data developed by other systems except that the SHN for LOGSACS must be developed by ODCSOPS (DAMO-FDA) and for PERSACS must be developed by ODCSPER (responsible organization entity to be designated). The SHN file will be developed on line and include the capability to establish recurring or one-time use data. The SHN capability will be to add or adjust data prior to producing final outputs.

The SACS module will be composed of all required SACS functions to include ODCSOPS processing of BOIP and SHN to equipment data for LOGSACS purposes. In PERSACS, however, the ODCSOPS processes stop after the basic PERSACS file is developed and personnel factoring takes place. Therefore, it is assumed that ODCSPER will be responsible for the processing of BOIP, Personnel Short Hand Notes (PSHN), EQPF, and projected personnel assets to the basic PERSACS file.¹ Appendix A lists other

¹ Assumption Number 9, Appendix A.

assumptions that, if approved, will establish some of the basic guidance for developmental and operational aspects of the improved on-line SACS.

The processing of SACS will be a continuous day-to-day effort so that the scheduled production of LOGSACS and PERSACS can take place with minimal notice and within hours instead of weeks as is current practice. The LOGSACS and PERSACS data as produced for use by various functions and systems will be maintained for historical purposes on magnetic tape and on line as the Army's requirements and authorizations data base for retrieval and ad hoc report purposes. This data base will be replaced with the same frequency as the LOGSACS and PERSACS production schedule.

The SACS data base update process will be to retrieve records from the feeder data bases and replace data in SACS. The SACS software will perform minimal editing since it is assumed that all feeder data are correct. In interfacing the feeder system data, erroneous control information such as UIC, SRC, and CCNUM will be reported to appropriate feeder system personnel for correction. A change file for suspense control will be maintained to ensure that corrections are made to feeder system data.

The overall SACS concept will not require USAMSSA analyst or programmer intervention once completely implemented. The mounting of magnetic tapes on tape drives to load on-line files will be the only USAMSSA involvement in the generation of the LOGSACS and PERSACS. All other SACS functions will be initiated and controlled by terminal operators located in ODCSOPS (DAMO-FDA).

Appendix B lists timeliness requirements for SACS data. The timeliness requirements as stated represent the time interval for data to flow between systems and to be processed within a system as well as the time interval required for SACS data users to respond to functional requirements as a result of data changes.¹ These time intervals are

¹Requisition lead-time, training lead-time, procurement lead-time.

ODCSOPS PROCESSING

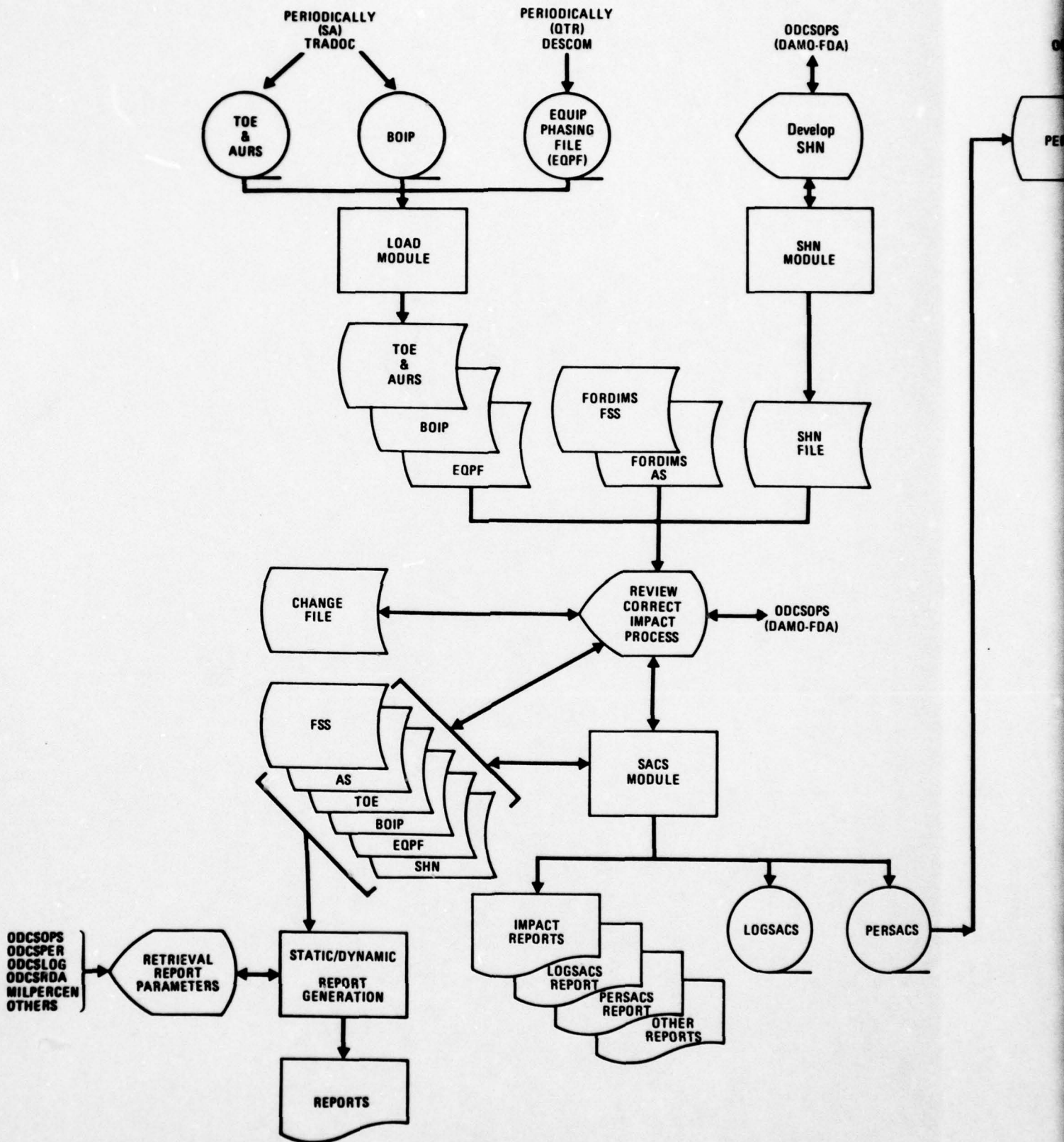
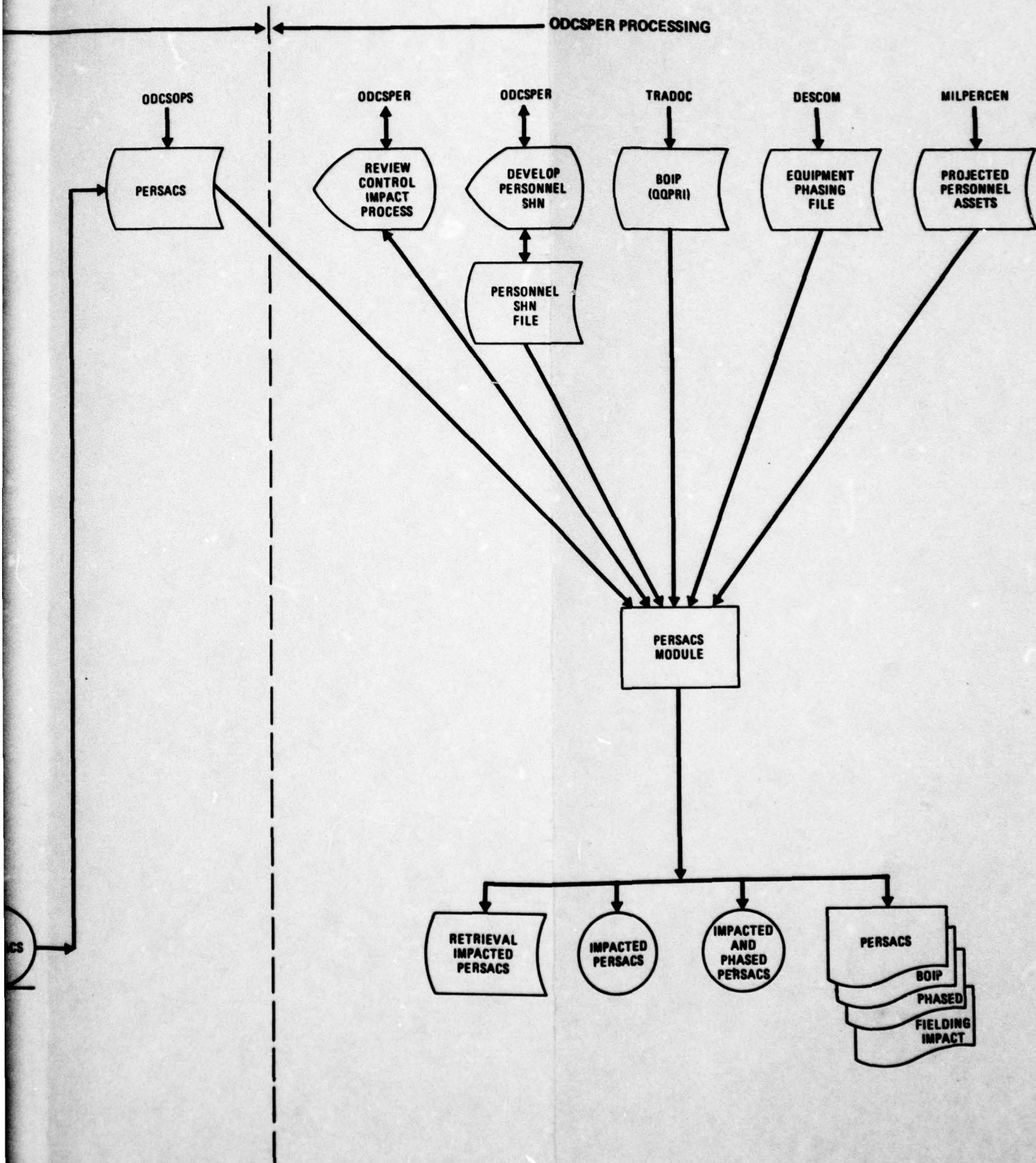


Figure 2.1. Proposed Improved/On-Line SACS



identified in Appendix B as "system time" and "functional time." As policy or other changes cause either of these time intervals to change, the projected time will increase or decrease accordingly.

The improved on-line SACS processes encompass current, developing and to be developed files. The premise in using these files, in the future SACS, is that they will be completely maintained within their respective system operational environments and no update or change to their data will be required in the SACS operational environment.¹ Therefore, each SACS feeder file will be provided by a single authoritative data source. All other Army users of these files will be using identical data and improved data standardization will result from implementing this concept.

The future SACS operational concept is based on the premise that terminal operations personnel in ODCSOPS (DAMO-FDA) will initiate freezing the force, loading files, and controlling all processes, thus obviating the need for submitting a Data Processing Request (DPR) to USAMSSA prior to each SACS run. Therefore, when ODCSOPS defines the SACS force selection criteria, it will be input via terminal. Simultaneously, via terminal, the required files will be identified by title, label, and volume serial number so that only USAMSSA operational personnel and computer resources are utilized and not USAMSSA systems analysts and programmers. This concept will be employed throughout the entire future SACS processes.² The future SACS will be capable of functioning on a continuing basis throughout each day to process some aspect of SACS and to prepare for the actual scheduled production of the LOGSACS and PERSACS. The daily SACS-type processing may include BOIP impact processing, SHN development and processing, and force review with respect to specific type units or specific UIC. The results of daily processes would be stored

¹ Some processing details must change; proposed required changes are discussed in Section 3 of this report.

² SIGMA-, basic SACS-, LOGSACS-, and PERSACS-type processes.

for use in producing SACS products, thereby greatly reducing the amount of time required to develop the LOGSACS and PERSACS, since their development would be a continuous ongoing process transparent to SACS product recipients.

An integral part of the future SACS will be an audit capability to account for all units by UIC that are registered in the force, all unit header records and all personnel and/or logistic detail records. This concept will introduce a control capability which has not been previously available to ensure that all units and their detail data are produced in each LOGSACS and PERSACS.

To reduce computer processing time, a procedure to identify the processing date (YYMMDD) must be established so that records that have not undergone change since the last processing are not processed again. By precluding the need for processing records that have not changed, SACS analysts will have more time to analyze changes instead of reviewing all records in given categories. However, all records will always be included in the LOGSACS and PERSACS products.

2.2 DATA SOURCES

The improved on-line SACS data sources will be identical to current sources except as they are modified or changed in the future by developing systems. The sources for data will be as follows:

- ODCSOPS/ODCSPER will provide the force structure and manpower management data through two principal subsystems of FORDIMS. They are the Force Structure Subsystem (FSS)¹ and the Authorizations Subsystem (AS).² FORDIMS will be replaced by VFDMIS in approximately 1 to 3 years.
- TRADOC will provide the TOE and BOIP files. TRADOC will be required to provide these files for the future SACS processes

¹Replaces the Force Accounting System (FAS).

²Replaces the HQDA TAADS.

based on HQDA needs so that current USAMSSA processes will not be required.

- ODCSOPS/ODCSPER, in conjunction with other interested ARSTAF and field activities, will develop the SHN for application to the equipment and personnel data produced in the LOGSACS and PERSACS respectively. The personnel SHN concept must be completely developed since it presently does not exist.
- ODCSLOG/DESCOM will provide an EQPF which will be the basis for coordinating equipment and personnel phasing. This file and its use must be developed since they presently do not exist.

2.3 DATA TIMELINESS AND ACCURACY

The data timeliness of the future SACS is related to the introduction of simple, yet adequate EDATE rules, coupled with requirements for projecting data a sufficient amount of time into the future to ensure that the logistics and personnel functional managers have sufficient "functional" time to react to changes in resource requirements. For example, personnel managers must have time to respond to normal requisitioning, training, and other demands and the logistics managers must have time to respond to normal requisitioning, procurement lead-time, and order-ship-time requirements. Appendix B identifies the time requirements and relates them to resource changes. A resource change¹ for personnel is construed to be any change in authorized grade and/or military occupational specialty (MOS) of a position even though the aggregate number of military personnel positions may not change. A resource change for equipment is the change or addition of a line item number (LIN) or an increase in an existing LIN quantity. Since the various MOS and LIN have different lead times, based on length of training courses and length of production cycles respectively, the DCSPER and DCSLOG will need to

¹Directed changes based on the semi-annual MOS change guidance and SB700-20 guidance are not considered in this category. Changes directed from MACOM or other headquarters are in this category.

periodically publish lead-time criteria for all MOS and LIN for use by TAADS documentation personnel in all MACOMs.

The future SACS required data accuracy is a 100% standard, in that SACS products must reflect data that are equal to those which are resident in field user files. The requirements and authorizations data used at the installation level as the basis for generating personnel and equipment requisitions must be identical to the SACS requirements and authorizations data provided to ODCSPER, ODCSLOG, and ODCSRDA functions. Therefore, functional users will have the capability to validate requirements utilizing data identical to those that were the basis for generating the requirement.

2.4 IMPROVED ON-LINE SACS LOGIC CONCEPT

The improved on-line SACS is based on the premise that control must be vested in the functional analysts who are responsible for preparing the LOGSACS and PERSACS. Therefore, the future SACS logic requires that all automated processes be programmed and properly catalogued for initiation via terminal. This concept will require that SACS analysts in ODCSOPS (DAMO-FDA) be the focal point for coordinating actions that have impacts on SACS input files and output products. The ODCSOPS SACS Branch is the focal point responsible for SACS data and, therefore, the personnel of this branch are key coordinators and problem solvers of perceived or real problems contained in SACS products. An operational aspect of future operations of SACS must be the recognition of this responsibility and appropriate ARSTAF and field directives must be promulgated concerning SACS objectives, uses, schedules, responsibilities, and products. These directives must be augmented by published SACS functional user guides.

The internal ODCSOPS (DAMO-FDA) future SACS operations will require close supervision over data flow, specific file identification, and volume serial numbers of mailed files.¹ This will be particularly important for

¹Volume serial number identifies the catalogued serial number of a reel of magnetic tape.

control over input data to ensure that the latest files are being used and to ensure that important events are recorded in the respective files. Through tracking functional force structure actions and managing the data inputs to SACS, the SACS analysts will be better equipped to respond to changes and questions. The SACS operational logic will require that SACS terminal operators key-in appropriate file identification for the various SACS processes. Such information may require that USAMSSA load files prior to SACS processing where the specific file is not resident on disk. The SACS software will prompt the terminal operator through the various SACS processing options so that minimal USAMSSA computer operator intervention is required. The typical options that will be built into the future SACS for terminal operator use are:

- Sign-On SACS - specify option desired
- Freeze Force - specify parameters
- Load Files - specify file and volume serial number
- Develop Short Hand Notes - specify function
- Analyze Resource Impacts - specify parameters
- Process - specify processes
- Generate Recurring Reports - specify
- Generate Ad Hoc Reports - specify data, sequence, format
- Review Audit - specify files
- Copy-Back-Up - specify files
- Load-Back-UP - specify
- Analyze PERSACS - specify
- Analyze LOGSACS - specify

The option list of major functions will be further subdivided into suboptions which the terminal operator will specify or default will apply which may automatically initiate processing. The option "process" may include suboptions as follows:

- Compare FSS and AS and identify errors
- Develop error transactions for processing
- Develop error transactions for review and processing
- Develop error transaction suspense control
- Identify and select required SRC from TOE

- Perform SRC assembly - display results
- Perform negative suppression - display results
- Apply BOIP data to LIN - apply SHN data to LIN
- Apply phasing data
- Split units identification
- POMCUS logic exceptions
- Audit totals review
- Reimbursable authorizations identified

This is a representative list of potential suboptions for processing under the major option "process" and it is not intended to be an actual option list.

The overall improved SACS concept will be capable of providing LOGSACS and PERSACS files to the functional users within several days instead of the 3 to 6 weeks that are presently required. Also, the SACS production schedule could be changed drastically and because of flexibility of the future SACS the impact on workload would be minimal.

SECTION 3
REQUIRED SYSTEM AND PROCEDURAL CHANGES
TO SUPPORT THE IMPROVED ON-LINE CONCEPT

3.1 GENERAL

The future SACS objectives¹ of providing data that are 100% accurate and timely were principal considerations in developing the list of changes and system development actions that are described below.

3.2 DATA MANAGEMENT

An ARSTAF force structure System Configuration Management and Control Group (SYCMACG) should be established under a Chief of Staff Memorandum (CSM) as soon as possible. The SYCMACG would consist of a chairperson and recording secretary, provided by ODCSOPS (DAMO-FDA), with appropriate ARSTAF and field activity representatives. The principal justifications for establishing this group are that force structure actions which establish resource requirements and authorizations create a "thread" through force structure systems to the logistic and personnel functions and systems, and that as force structure systems implement changes, so should functional systems to ensure that intended benefits are actually achieved by all users of requirements and authorizations data.

The initial SYCMACG responsibility would be to develop and coordinate its operational concept to include scope, objectives, and detailed responsibilities, and prepare, coordinate, and publish an appropriate SACS regulation which would specifically establish its current and future role in the force structure, logistics, and personnel functional areas.

In order to be effective, the SYCMACG should be the coordination point for all SACS related data, SACS issues and problems, and changes to SACS feeder systems. Specifically, the SYCMACG would be responsible for processing, reviewing, and recommending changes and revisions to:

¹F. O. Deppner et al., Report of Task C - Data Analysis of Accuracy and Timeliness, General Research Corporation, 1070-02-79-CR, March 1979.

- SACS system configuration baseline
- Data flow
- Edit rules
- Audit rules
- Processing criteria
- Interface requirements
- Functional system requirements of SACS and feeder systems.
- Procedures applicable to current, budget, and POM years
- Documentation requirements
- Operational concepts

3.3 DEVELOPING SYSTEMS

The FORDIMS and VFDMIS are identified as developing systems with FORDIMS scheduled for complete implementation by end calendar year 1979 and VFDMIS scheduled for implementation in the third quarter calendar year 1980. These systems will provide improved accuracy and timeliness in data inputs to SACS with the most significant improvements being built into VFDMIS. VFDMIS will accommodate many beneficial improvements in the force structure systems. As a result of implementing VFDMIS planned improvements (defined in Appendix D) and those improvements identified below, the ARSTAF will be provided an excellent enhancement to the current force structure systems.

3.4 RECOMMENDED CHANGES TO SUPPORT THE IMPROVED ON-LINE SACS

The rules identified below should be viewed as standards and objectives that should be implemented as soon as possible, but not later than the date of the implementation of VFDMIS.

3.4.1 EDATE Rules

3.4.1.1 Applicability

EDATE rules should be implemented in VFDMIS, FORDIMS (both FSS and AS), TAADS, and ITAADS.

3.4.1.2 Proposed Rules

a. EDATEs will be assigned to a specific date each month to accommodate readiness reporting as well as all other functional actions. The 16th of each month will best accommodate all needs.

b. The time interval between EDATEs of any one UIC must be at least 6 months.

c. Initial EDATEs will be established following the timeliness criteria related to data elements contained in Appendix B as follows:

	Short Range ¹ (Months)	Mid- to Long-Range ¹ (Months)
LOG CONUS	7.5	7.5
LOG Overseas	7.5	7.5
PER CONUS	13.0	31.0
PER Overseas	16.0	34.0

d. Changes to established EDATEs must reflect the above criteria plus:

(1) No current year EDATE change will be permitted.

(2) No budget year EDATE change will be permitted unless the time interval between the current date and the EDATE is at least equal to the applicable short-range time requirement and no specific LIN or MOS lead-time criteria are applicable. If specific LIN or MOS criteria apply, no change in EDATE will be permitted in the budget year.

(3) No program year EDATE change will be permitted unless the time interval between the current date and the EDATE is at least equal to the applicable mid- or long-range time requirement.

¹ ODCSOPS, ODCSLOG, and ODCSPER will be required to publish, at least annually, the specific lead-time criteria by type unit, LIN, and MOS for use in the mid- and long-range time frame.

(4) EDATE changes to program outyears may be made at any time providing the mid- and long-range time interval criteria are met.

e. EDATE rules are applicable to proponent approved and proponent proposed requirements and authorization documents.

f. EDATE rules are applicable to LIN, MOS, grade, and quantity changes.

g. HQDA may approve exceptions, as required.

3.4.2 Requirements and Authorizations Documentation Rules

3.4.2.1 Applicability

Requirements and authorizations documentation rules are applicable to VFDMIS, FORDIMS AS, TAADS, and ITAADS.

3.4.2.2 Proposed Rules

a. Unit documentation once submitted to HQDA for an EDATE cannot be changed until the next applicable EDATE.

b. Unit documentation once submitted to HQDA for a CCNUM cannot be changed unless rule a applies and a new CCNUM is utilized.

c. Unit documentation will not be changed until a time interval of at least 6 months has elapsed from last change or until the next EDATE, whichever provides the shortest time interval.

d. HQDA may approve exceptions, as required.

3.4.3 Edits

3.4.3.2 Applicability

Edit rules are applicable to VFDMIS, FORDIMS, TAADS, TOE, BOIP, SHN, EQPF, and other systems that may, in the future, interface with SACS.

3.4.3.2 Proposed Rules

- a. All SACS feeder systems must perform data value edits at time of input so that stored data values are 100% accurate when provided to SACS.¹
- b. Data values must be formulated by responsible functional area personnel in accordance with approved SYCMACG guidance.
- c. Changes to the automated edit tables or files must be verified and updated by responsible functional area personnel at least once each 6 months.
- d. All input data elements will be edited against appropriate authorized data element values.
- e. All input data element values will be edited for compatibility with other data values in the same record and for logic with data element values stored in other records describing the same UIC.
- f. Edit value, edit standards, and edit logic will have equal applicability to all force structure systems processing source data input.
- g. Each interface must identify which system will provide the authoritative data in the case of mismatched data values.²

¹The principal systems are currently FORDIMS and TAADS. As evolutionary changes are made to these systems, edit improvements should be implemented as feasible.

²Edit rules apply to data interface only to the extent that when data appear to be in error one system must be accepted as correct so that processing continues.

3.4.4 Audit

3.4.4.1 Applicability

Audit rules are applicable to VFDMIS, Unit Identification System (UIS), FORDIMS, TAADS, and SACS.

3.4.4.2 Proposed Rules

- a. All UICs registered in the UIS which receive an allocation of manpower or equipment must be reflected in all force structure systems.¹
- b. All UICs (rule a) will reside on a file updated daily by the UIS and be accessible by all force structure systems.² Such control files must reflect all applicable UIC EDATES.
- c. Once a MACOM UIC Information Officer (UICIO) registers a UIC in the UIS and rule a applies, the TAADS submission to HQDA must be within 90 days.
- d. Registered UICs will be the basis for UICs to exist in all force structure systems with an exception being made for planning units.
- e. FORDIMS(FSS) will identify which units must have both personnel and logistics detail data records or which type detail data records, if only personnel or logistics data are applicable.
- f. All systems will establish controls to account for all units and their respective personnel and/or logistics detail records to ensure that UICs and their applicable detail are always available throughout a unit's life cycle.

¹ ODCSPER and MILPERCEN systems should use identical UIC audit and control techniques as force structure systems. Note rule b. All systems should use the identical control file. The different functional areas should not utilize unique update systems fed by UIS changes.

² The UIS is operated by the ODCSOPS command and control system. A daily file transported to USAMSSA and loaded thereon for edit and control will serve this purpose.

g. SACS will account for all UICs and the applicable personnel and logistics detail records prior to each production run. Exceptions will be identified for corrective action and special reporting. Through each SACS process, record counts will be utilized to ensure that output record volume equals the input record volume. If differences between these record counts occur, they will be investigated and corrected or explained to recipients of LOGSACS and PERSACS.

h. SACS will have an audit module that will provide record count displays and hard copy reports of the UIC header records and equipment and personnel detail data records for review at each processing step where record handling takes place.

3.4.5 Data Flow

3.4.5.1 Applicability

Data flow rules must be implemented in VFDMIS, FORDIMS, and TAADS. These data flow rules represent objectives for force structure systems to achieve over the period of time for implementing VFDMIS.

3.4.5.2 Proposed Rules

a. Force structure data must flow between HQDA and MACOMs and between MACOMs and HQDA in an unconstrained manner immediately following each decision or event that requires recording.

b. Any data flow constraint imposed in one force structure system must apply equally to other force structure systems.

c. Force structure systems must have a periodic cut-off of all processing actions and an established period for reconciliation and balancing of the force structure data base(s) for report purposes. Such reconciliation and balancing should occur monthly; however, quarterly would be acceptable.

d. The reconciled-balanced force structure data base(s) would be the official source of data for all requirements and authorizations reporting to include SACS data preparation and reporting.

e. Reconciliation and balancing actions during cut-off periods must resolve outstanding (1) strength balances in the FORDIMS FSS Resource Command Management Accounts, and (2) AS data pending approval for use in FSS.

f. Response time standards must be established for MACOM response to guidance, force and command managers to approve/disapprove MACOM response to guidance, and MACOM response to approved guidance through TAADS submission. These standards, once established, must be built into the automated force structure systems together with procedures to ensure adherence with them.

3.4.6 SACS Initiation

3.4.6.1 Applicability

The current data processing request (DPR) rules applicable to initiate the SACS processing of the LOGSACS and PERSACS must change from the manually prepared DPR, to which USAMSSA responds, to an automated terminal input to which catalogued programs respond.

3.4.6.2 Proposed Concept

a. Through the use of interactive software and terminal hardware, the request to freeze (by copying) the force and its parameters (EDATE, COMPO, and FICOD) will be input via a keyboard. Based on this terminal input, the parameters would be processed with software that will copy the appropriate FORDIMS files from FSS and AS.

b. As a part of inputting the parameters to freeze the force, the DAMO-FDA analyst will review the resource command management account and AS data pending approval files and make a determination as to whether or

not actions are required to resolve outstanding data in these files.¹ This review capability will be automated so that it provides output prior to executing the freezing of the force.

c. Included as a part of the SACS initiation process will be loading the TOE file to disk. In this process, the Parent Unit Roll-Up will be performed, if applicable.

3.4.7 SIGMA Process

3.4.7.1 Applicability

The SIGMA process is a part of the initial SACS procedures. It is the initial processing to prepare the force for the LOGSACS and the PERSACS.

3.4.7.2 Proposed Concept

a. The future process that replaces SIGMA must be interactive and must initiate via terminal the capabilities to:

- Review the resource command management accounts and AS data pending approval for use in FSS.
- Input parameters for freezing the force.²
- Copy the appropriate FSS and AS files for SACS.³

¹The DAMO-FD and DAPE-PB objective should be to have zero strengths in the resource command management accounts and no transactions in the AS data pending approval file, meaning that all strengths are spread to UICs and all AS documentation actions have been recorded in FSS. Since it will be extremely difficult to achieve this objective, these two important FSS suspense-type actions must be closely managed to ensure prompt resolution of pending actions.

²The resourced force (FICOD F) and the planning force (FICOD P) comprise the master force. Since it is likely that some FICOD P units may be involved in each SACS run, the specific method for processing planned units must be developed.

³Utilize a concept whereby date of last activity is the factor to determine whether the old copy is still valid. Where no change has been processed, the date of last activity would be unchanged.

- Input parameters for loading the TOE file to disk and in the process summarize to parent unit level, if required.
- Review the FSS records in conjunction with AS data.
- Identify mismatch and error conditions for correction; transaction preparation and establishment of suspense records are required.
- Provide error messages and displays via terminal and/or hard copy.
- Identify units with plus and/or minus organizational entities and compare the FSS and AS SRC records to categorize these units as:
 - FSS and AS SRC match
 - FSS and AS SRC mismatch

Those units with FSS and AS SRC mismatch will be controlled by the AS SRCs. Display the results of this match.
- Initiate an audit to account for all units and their respective detail data.
- Identify TDA organizations without detail records for corrective actions.
- Select the detail records from the TOE file, as required, always using ALO 1 as "required quantities" and the actual ALO from FSS to select the "authorized quantities."
- Generate transactions for corrections as required.
- Perform the SRC assembly actions controlling on both FSS and AS and display the mismatches via terminal and/or hard copy.
- Check the audit data to ensure that all units are in the initial (basic) SACS data base, that they have personnel and/or equipment detail data selected from either AS or TOE.
- Process personnel factoring.

- Review for negative balances of equipment and personnel; prepare a report of such balances by unit and eliminate the negative balances.

3.4.8 Basis of Issue Plans (BOIP) File

3.4.8.1 Applicability

The BOIP file is applicable to PERSACS, LOGSACS, and resource impact analysis.

3.4.8.2 Proposed Concept

a. The monthly BOIP provided by TRADOC will not be updated at HQDA and will be used as required to determine resource impact and to modify both the LOGSACS and PERSACS.¹ The responsibility for implementing BOIP in PERSACS² will rest with ODCSPER, whereas the responsibility for BOIP in LOGSACS will remain with ODCSOPS.

b. The TRADOC BOIP file must be reconciled with the current HQDA BOIP file to ensure that no data is lost in changing to the TRADOC BOIP.

c. The BOIP processing will be separate from all other SACS processing. This capability must provide resource impact displays for ARSTAF analysis. The software to be developed must be interactive and BOIP processing results will be displayed via terminal or hard copy reports. The processing will be flexible so that either all or only selected SRCs that match a BOIP may be changed or all SRCs may be changed

¹The BOIP data do not reflect numbers of personnel to be authorized at the various authorized levels of organization (ALO). This is a deficiency in the current BOIP data. Also, FICOD F (recourced) units may have the number of authorized military spaces increased from the FSS constrained number. This difference must be identified as not resourced.

²Regardless of ARSTAF involvement, BOIP processing in PERSACS must be developed and implemented as soon as possible to improve projected personnel requirements and authorization data provided MILPERCEN.

based on a percentage factor. A BOIP control file will trigger the type processing on an exception basis. For example, entering a BOIP number on the control file with appropriate criteria would establish processing constraints, whereas no BOIP numbers on the control file would permit unconstrained BOIP processing.

d. The BOIP file and its processes should be modified to encompass the identification of trade-off personnel spaces when the trade-off is outside of a single SRC.

e. The BOIP software must be established for daily use and it must accommodate the ODCSOPS needs of DAMO-RQ and DAMO-FD so that resource impact data are based on identical logic/software rather than different logic/software as is the present practice. The HQDA BOIP resource impact processing should be the basis for all HQDA BOIP-related reports. The TRADOC BOIP-related reports prepared for the ARSTAF should be discontinued at the time that the HQDA BOIP processing is implemented.

3.4.9 Table of Organization and Equipment (TOE) File

3.4.9.1 Applicability

The TOE file is applicable to PERSACS, LOGSACS and the assembling of SRC detail data.

3.4.9.2 Proposed Concept

The TOE file presently provided to HQDA by TRADOC is updated by USAMSSA to develop the TOE computational file for SACS. A principal part of the USAMSSA processing is to aggregate all subunit data to parent unit level. This processing should be a part of the TRADOC TOE file maintenance processing so that HQDA is provided a useable TOE file that can be direct SACS input without updating. By placing this requirement on TRADOC, a single authoritative source for the TOE file will be established.

3.4.10 Short Hand Notes (SHN)

3.4.10.1 Applicability

The SHN file and processing are applicable to both PERSACS and LOGSACS.

3.4.10.2 Proposed Concept

a. The SHN will represent ARSTAF desires with respect to modifying PERSACS and LOGSACS output data. The development and implementation of improved SHN processing will continue to be an ODCSOPS responsibility for LOGSACS; however, it will be an ODCSPER responsibility for developing and implementing SHN in PERSACS.

b. The SHN file must be developed so that data can be input and changed via a terminal.¹ The data must accommodate one-time and multi-use records for application to UIC and SRC.

c. The SHN concept has application to both PERSACS and LOGSACS; however, because of data differences between the detail records of PERSACS and LOGSACS, the logic of applying personnel SHN may significantly vary from that for equipment SHN. Therefore, one SHN system will not apply to both the PERSACS and LOGSACS.

3.4.11 Phasing

3.4.11.1 Applicability

The phasing of equipment and personnel into units must be on a coordinated schedule and is applicable to the SACS system.

3.4.11.2 Proposed Concept

a. The data for building an equipment phasing file (EQPF) will originate at DESCOM from the phased equipment module (PEM) and should be

¹Automated file update capability must be developed to handle SB700-20 and MOS changes.

provided on a quarterly basis, as a minimum. The PEM module is scheduled for implementation in January 1980.

b. The EQPF must be used by ODCSPER to phase personnel requirements and authorizations so that the personnel availability will coincide with equipment availability.

c. The EQPF may be used by ODCSOPS to record the projected equipment availability date with applicable UIC and LIN data since EQPF data may influence unit EDATE. This phasing data will be available to force and command managers for periodic review and change of EDATE based on equipment availability.

3.4.12 Reimbursable Personnel Authorizations

3.4.12.1 Applicability

The identification of reimbursable personnel is applicable to VFDMIS, FORDIMS, TAADS, ITADDS, and SACS.

3.4.12.2 Proposed Concept

a. The documentation of reimbursable personnel can best be accommodated through the Army Management Structure (AMS) by using OSD program element 91519A.¹

b. The allocation of resources under FORDIMS and the documentation of resources in TAADS through the use of the guidance tracking procedure will provide ODCSPER and MILPERCEN with positive identification of reimbursable personnel positions.

¹PE 91519A currently has both officer and enlisted spaces authorized in both FY79 and FY80 in the FYDP. Since this PE is not currently used in the AMS, this manpower must be documented in other AMS codes. Not only does this preclude identifying reimbursable personnel spaces, it also distorts and contributes to the inability to balance AMS code resources to the respective FYDP PEs.

3.4.13 TDA Augmentation Units to MTOE Units

3.4.13.1 Applicability

The TOE unit augmentation identification is applicable to VFDMIS and FORDIMS.

3.4.13.2 Proposed Concept

The unit actions taken concerning TDA augmentation are often out of synchronization with the parent unit being augmented. Therefore, each time a unit change is processed, four positions of UIC should be reviewed automatically in all other TDA units to determine if an augmentation exists for the unit. If an augmentation unit exists, appropriate EDATE change or other action must be taken to align the augmentation with the MTOE unit being changed.

3.4.14 Input of Detail Data at HQDA

3.4.14.1 Applicability

The input of detail data at HQDA is applicable to VFDMIS, FORDIMS, TAADS, and SACS.

3.4.14.2 Proposed Concept

a. In instances where change must be immediately reflected in the HQDA force structure systems or when a resource command fails to provide documentation within established time standards, HQDA will input the necessary detail data and advise the resource command accordingly.

b. SACS-identified deficiencies could be handled in this same manner and thus possibly reduce the use of and need for SHN.

3.4.15 TAADS Documents Review

3.4.15.1 Applicability

The TAADS documents review is applicable to VFDMIS, FORDIMS, and TAADS.

3.4.15.2 Proposed Concept

Section II (Personnel) of TAADS documentation is currently reviewed in ODCSPER (DAPE-MBA). This section contains personnel detail data such as MOS, grade, title, ASI, and remarks. The Section II review could be improved and strengthened to ensure compliance with AR 611-101, AR 611-201, and other guidance. Figure 3.1 reflects the current TAADS document flow. Figure 3.2 depicts a proposed change in the TAADS document flow to reflect a personnel review activity which should be established (at MILPERCEN perhaps) and that would be on a comparable basis with the US Army Equipment Authorization Review Agency (USAEARA). This new activity would assure the responsibility for TAADS document review and relieve DAPE-PBA personnel so they could concentrate on their command management and other responsibilities.

3.4.16 Complete LOGSACS and PERSACS Data Base

3.4.16.1 Applicability

The complete LOGSACS and PERSACS data base is applicable to VFDMIS, FORDIMS, and SACS.

3.4.16.2 Proposed Concept

a. The improved on-line SACS will develop a complete requirements and authorizations data base that reflects all unit actions, modernization actions, and equipment and personnel phasing.

b. This data base should become the Army's single authoritative source for all reports concerning personnel and equipment requirements and authorizations. This will ensure that all users of these data have identical figures.

c. The list of reports in Appendix C is now prepared from FORDIMS AS. These are candidate reports for the future SACS data base, since currently they do not necessarily reflect complete data.¹

¹ F. O. Deppner et al., Report of Task C - Data Analysis of Accuracy and Timeliness, General Research Corporation, 1070-02-79-C, March 1979, p. G-3.

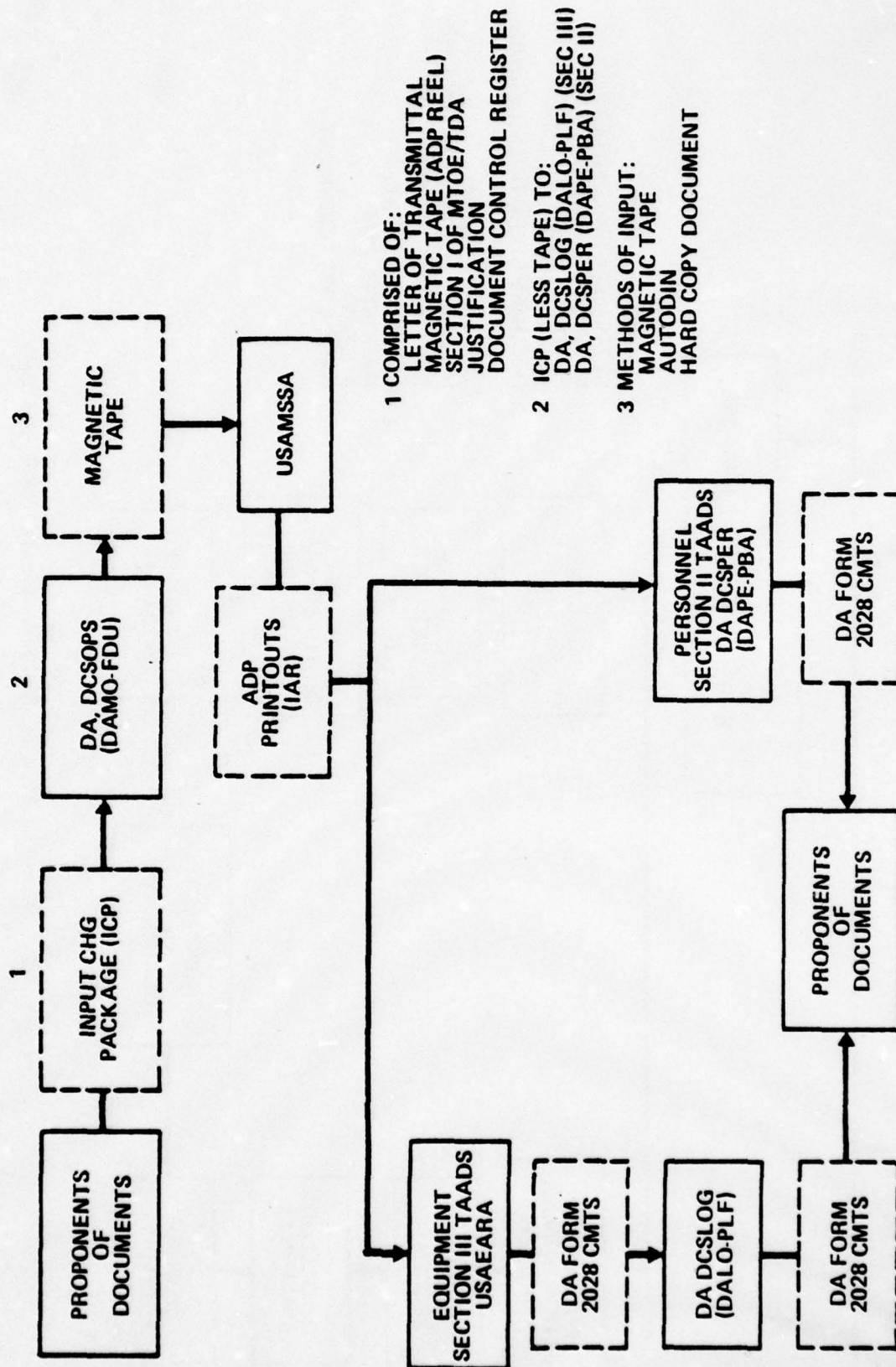


Figure 3.1. Current Flow of TAADS Documents (MTOE and TDA)

3.4.17 SACS History

3.4.17.1 Applicability

The SACS history is applicable to SACS, Personnel Authorizations Analysis System (PAAS), and Basis of Issue Monitoring and Recording System (BOIMARS).

3.4.17.2 Proposed Concept

a. After each SACS (LOGSACS and PERSACS generation), a magnetic tape copy of the LOGSACS and PERSACS will be created and archived for future analytical use. SACS history should be maintained for at least 7 years based on CY, BY, PY, plus 4 out years.

b. The history files would be used by PAAS and BOIMARS and for other analytical purposes, such as inquiries, researching past requirements, comparing current requirements to similar past requirements.

3.4.18 SACS Documentation

3.4.18.1 Applicability

SACS documentation requirements are applicable to VFDMIS, FORDIMS, TAADS, BOIP, TOE, EQPF, and other systems that interface with SACS.

3.4.18.2 Proposed Concept

a. Complete documentation is required to be used in day-to-day operations by personnel that either work directly with SACS or with SACS products.

b. SACS documentation as a minimum should consist of:

- A force structure systems "data element directory" which should contain descriptions, character length and type, components, values, and system use for each data element.
- A SACS Functional Users' Guide which would be specifically oriented for users of SACS data and products outside ODCSOPS.

- o A SACS Systems and Procedures Manual which would be oriented for SACS Branch personnel (DAMO-FDA).

c. SACS documentation should encompass a full briefing or training course concerning force development, force maintenance, use of force data, and the pervasive nature of force data as produced by the SACS.

d. The improved on-line SACS should be documented by ADP documentation standards published in DOD Standard 7935.1-S, Automated Data Systems Documentation Standards. These standards specify that documentation should consist of:

- Functional Description
- Data Requirements Document
- System/Subsystem Specification
- Program Specification
- Other documents as required

3.4.19 Changes to Existing Data Elements

3.4.19.1 Applicability

The data elements that are required by the functional users must be provided by the VFDMIS, FORDIMS, TAADS, TOE, BOIP, EQPF, and SACS in SACS data and products.

3.4.19.2 Needs

a. Where unit activations are being coordinated with unit deactivations, an audit trail to reflect the old UIC is required so that both the personnel and logistics function can effectively and efficiently distribute the assets of the discontinued unit(s).

b. A list identifying POMCUS equipment is needed so that SACS equipment detail data include such identification. The POMCUS equipment list must be developed by ODCSOPS, ODCSLOG, and ODCSRDA with ODCSOPS (DAMO-RQ) taking principal responsibility. These data must be applicable

for at least 1 year and should be projected for 3 to 5 years, so that turbulence is held to a minimum in positioning POMCUS stocks.

c. The minimum requirements for training purposes must be associated with equipment requirements. ODCSRDA needs to properly compute equipment requirements for training. The data element would likely be a variable percentage factor based on the amount of equipment use during training.¹

d. The additional skill identifiers and the language identification codes must have their own data fields in TAADS, FORDIMS, and SACS so that personnel remarks codes are not distorted and all coded special requirements are provided to personnel managers.

e. The security investigation status code (SISCO) should be a required entry for all authorized positions with a code, such as NN, meaning that no SISCO applies to this position. The SISCO should be a stand-alone data field and not included in the position remarks data element field.

f. Complete descriptive data are required for geographically split organizations. In this respect, HQDA policy published in AR 310-49 series regulations on TAADS requires change. Also, the documentation of functionally and geographically split organizations has separate descriptive designators assigned; however, the system provides no discriminator to differentiate between these two different types of split organizations. Also, MTOE organizations that are geographically split but assigned to the same command are not documented separately. Complete descriptive data to include ARLOC, GELOC, and LOCCO are required for each element of all organizations that are geographically separated from each other. This requirements is for distribution of both personnel and equipment.

¹ A study of training equipment needs is currently under way within ODCSRDA.

g. Selected quantity fields, when output on magnetic tape for the LOGSACS and PERSACS, are currently coded with binary represented numbers. This requires translation each time they are utilized. On some computers, because of various uniqueness, this presents technical difficulties in performing the translation. Quantity fields should be coded as all other digital data regardless of whether it is alphabetical or numerical. This will facilitate the use of SACS generated magnetic tape and the programming of software for all users.

h. The enlisted MOS code (MOSCO) is identified in AR 611-201 as a 5-position code which includes the skill (3 positions), skill level (1 position), and the special qualifications (1 position). FORDIMS identifies the MOS as a 4-position code and the special qualifications code is handled in a 1 position field separated from the 4 positions. Departures from standard data use cause more logic and computer program coding to be written, debugged, and implemented for systems. The MOS standard as well as all data element standards must be adhered to.

3.4.20 Data Synchronization

3.4.20.1 Applicability

Data synchronization is required between all interfacing force structure systems or files. They are VFDMIS, UIS, FORDIMS, TAADS, TOE, BOIP, SHN, and EQPF.

3.4.20.2 Proposed Concept

a. Control data elements are used for interfacing or sequencing records. Such data elements are UIC, SRC, CCNUM, MOS, LIN, AMSCO, and other similar ones that identify some unique aspect of a data record. These data elements must always agree in each file where they are stored.

b. Changes to data values that are periodically published, such as SB 700-20 (LIN), MOS, and AMSCO changes, must be implemented in all files on a coordinated schedule so that all records of interfacing systems match at all times.

c. UIC and SRC editing and control must be installed and effectively managed in all systems. This must encompass the plus and minus actions to specific units.

d. CCNUM is a numerical document control number assigned by each MACOM to TAADS documents. Controls must be implemented to ensure that once a CCNUM is used it cannot be reused.

3.4.21 PAAS and BOIMARS

3.4.21.1 Applicability

These SACS data analyzers are applicable to PERSACS and LOGSACS.

3.4.21.1 Proposed Concept

a. These analyzers should be upgraded to be a part of the overall audit concept for SACS data.

b. Both PAAS and BOIMARS should be programmed to be used in either on-line or batch mode.¹

c. These analyzers should be upgraded to include mathematical analysis techniques such as computing a moving average and, if the change exceeds a specified percentage, reviewing the detail data or computing a standard deviation and, if it exceeds the specified acceptable deviation, reviewing the detail data.

3.4.22 System Back-Up/ Restore Capability

3.4.22.1 Applicability

The improved on-line SACS requires a system back-up and restore capability.

¹The on-line concept presupposes that the previous LOGSACS or PERSACS can be loaded to disk, hence disk storage space must be available for on-line operation.

3.4.22.2 Proposed Concept

a. A system back-up and restore capability must be built into the improved SACS software to accommodate saving work files as well as entire files on a periodic basis. This will ensure that significant blocks of interactive work are not lost because of system or other failure.

3.4.23 Organizational Structure

3.4.23.1 Applicability

The principal force structure actions are taken in DAMO-FDF and DAMO-FDP.

3.4.23.2 Proposed Concept

a. Force management for all years (CY, BY, PY and out years) must be vested in a single individual or group of individuals.

b. The same UIC generally has record entries applicable to the CY and BY which are the responsibility of DAMO-FDP, and record entries applicable to the program years which are the responsibility of DAMO-FDF. This current operational concept leads to unintentional disconnects in force structure actions which could be avoided by periodically reviewing unit actions across all years.

APPENDIX A
ASSUMPTIONS APPLICABLE TO THE
IMPROVED ON-LINE SACS

ASSUMPTIONS

1. The on-line SACS will continue as the principal system to provide a periodic statement of equipment and personnel requirements and authorizations to the Army for distribution and planning actions at all echelons.
2. Current LOGSACS and PERSACS products will remain essentially unchanged.
3. Future SACS processes will consist of on-line and batch-type software to be utilized and initiated interactively via terminal.
4. ODCSOPS will initiate action to establish a Force Structure System Configuration and Control Group.
5. Development of the improved on-line SACS will impact functional user systems minimally.
6. Force Structure guidance flow will not require modification to support an on-line SACS, except that EDATE rules and top-of-system detail data loading capability should be implemented.
7. SACS feeder systems will remain unchanged; except, they will be improved to accommodate revisions to rules, controls, edits, and "top-loading" of detail data and except that VFDMIS will supersede FORDIMS.
8. Application of BOIP and SHN in LOGSACS will remain an ODCSOPS responsibility.
9. Implementation of BOIP and SHN in PERSACS is an ODCSPER responsibility; however, ODCSOPS will develop the basic PERSACS and ODCSPER will develop BOIP and SHN systems to be compatible with the basic PERSACS.
10. Future availability of the TRADOC BOIP file will be monthly; it will be used without USAMSSA updating for purposes of resource impact and SACS processing. SHN resource impact will be an integral part of overall resource impact determinations.

11. The TOE file will be provided monthly by TRADOC; it will be used in SACS processing without USAMSSA updating, if practical.
12. Future SACS processes will be modularized by function for either stand-alone or job-stream processing.
13. Future SACS processes will utilize record control and accounting techniques to assure that output products consist of all units and their respective personnel and logistics detail records.
14. Retrieval capability will be made available to functional users, as required, based on security constraints and hardware limitations.
15. On-line SACS software will not require significant alteration when FORDIMS is superseded by VFDMIS providing fundamental changes are not made to data elements.
16. Functional coordination software will be required to interface the phasing of equipment and personnel requirements and authorizations to determine if asset shortfall is projected for a future date.
17. Current USAMSSA hardware will be utilized as the on-line SACS hardware; additional terminals may be required in ODCSOPS and ODCSPER.

APPENDIX B

TIMELINESS REQUIREMENTS AND DEFINITIONS

TIMELINESS REQUIREMENTS AND DEFINITIONS

Data elements and their timeliness requirement are related to resource distribution since changes to data elements change resource requirements which require functional user response. Functional user response requires time. That time is identified as "functional time" for Category II and III data elements, described below.¹ Therefore, as data elements are initially established and subsequently changed, personnel making changes must be cognizant of the requirement to project resource change actions sufficiently into the future so as to provide the functional users the required response time.

To implement the foregoing, data element end use must be known. Regardless of why data are initially established or changed, the personnel responsible for formulating the initial or change data must be cognizant of the resultant functional actions that are triggered because of such data. In order to provide initial guidance for this purpose, SACS data elements have been grouped in three categories. Each category and its initial data element assignments are:²

Category I: This category contains data elements which are used in force structuring, control, internal processing, accounting, unit identification, and general functional support information. These data elements are included in the SACS computation and are provided to functional users via the LOGSACS and PERSACS. The timeliness requirement is that Category I data elements be available in each quarterly SACS product. Category I data elements may be established or changed at any time. Category I data elements are:

¹In addition to functional time, "system time" must be included so that time for data flow and processing is provided. Together, these time periods equal the projected time or the amount of time necessary to project changes to provide the required response time from the functions utilizing LOGSACS and PERSACS data.

²Data elements and mnemonics are defined in Report of Task D - Data Requirements Document, General Research Corporation, 1070-03-79-CR, May 1979.

ACTCO	ELSEQ	MBLOC	PRQTA
ADCON	ERCOD	MBPRD	PRQTO
AMSCO	FICOD	MBSTA	RCNUM
ARLOC	FNCAT	NTREF	REPCO
AUTHR	FORCO	OPAGY	ROBCO
BASIS	JCSTY	OPDAT	SORCE
BRNCH	LAOTH	PAUBO	SRCTO
CARSS	LAUBO	PAUSH	STAFA
CATCO	LAUSH	PAUTA	STATS
CCNUM	LAUTA	PAUTO	TPSNA
CHGNR	LAUTO	PECOD	TYPCO
COMPO	LRBOI	POMCL	UICOD
DAMPL	LROTH	POMCU	UNCLC
DAPPL	LRSHN	PRBOI	UNMBR
DOCNO	LRTAD	PRMK1	UNTDS
DPMNT	LRTOE	PRMK2	
DSCMP	MBCMO	PRQSH	

Category II: This category identifies data elements which impact resources. Projections must be made based on system and functional response times. These data elements are used to validate authorizations and to distribute equipment and personnel. When a force or command manager at HQDA or MACOM establishes or changes a data element in this category, the EDATE must be advanced far enough into the future to allow for the system and functional response time for logistics and personnel actions to be completed within the projected time frames. The projected time (in months) for Category II is given in Table B.1. The associated data elements are:

ASICO	IDENT	PAMIL	REQEQ
AUBFA	LICCO	PAOFF	RQSTR
AUSTR	LINUM	PAWOF	SPLIT
AUTEQ	LOCCO	PRCIV	SQICO
BPTRI	MACOM	PRENL	STNNM
BRNCP	MOSCO	PRMIL	TDATE
EDATE	PACIV	PROFF	UNPID
GRADE	PAENL	PRWOF	

Table B.1
CATEGORY II PROJECTED TIME (MONTHS)

	System Time ^a	Functional Time	Projected Time
LOG CONUS	7.5	b	7.5
LOG Overseas	7.5	b	7.5
PER CONUS	7.0	6.0	13.0
PER Overseas	7.0	9.0	16.0

^aThis is a maximum time requirement based on making changes the day after the MOC window closes. This time requirement can be reduced as data are established or changed within the 6-month interval between closing and opening of the semiannual MOC windows. The time may contract or expand depending on data flow and system processing changes that impact time requirements.

^bThe order-ship time requirements may be specified, if applicable, in the use of SACS data. These must be defined by ODCSLOG.

Category III: This category contains data elements which impact resources. Projections must be made based on system and functional response time. These data elements are used primarily for modernization, phasing, recruiting, training, and mid- and long-range planning. When force and command managers and other HQDA staff planners incorporate changes in the force in the out years, the EDATE established for these data elements must be advanced far enough into the future to allow for system and functional response time plus the additional lead-time requirements¹ associated with logistic actions and the recruitment, training, distribution time for personnel. The projected time requirements (in months) for Category III are given in Table B.2. The associated data elements are:

¹The specific lead time requirements must be published by ODCSLOG and ODCSPER and implemented by command and force managers and MACOM.

ASICO	GRADE	PAMIL	PRWOF
AUBFA	IDENT	PAOFF	RESEQ
AUSTR	LICCO	PAWOF	RQSTR
AUTEQ	LINUM	PRCIV	SQICO
BPTRI	MOSCO	PRENL	
BRNCH	PACIV	PRMIL	
EDATE	PAENL	PROFF	

Table B.2
CATEGORY III PROJECTED TIME (MONTHS)

	System Time ^a	Functional Time	Projected Time
LOG CONUS	7.5	b	7.5
LOG Overseas	7.5	b	7.5
PER CONUS	7.0	24.0	31.0
PER Overseas	7.0	27.0	34.0

^aSee note a, Table B.1.

^bSee note b, Table B.1.

APPENDIX C

CURRENT FORDIMS AUTHORIZATIONS SUBSYSTEM REPORTS

Title	Customer Control No.	Frequency	Purpose
*TAADS Detail Aviation Report	PG-0113-74	Monthly	Validation of aviator positions in approved MTOE and TDA documents
*TAADS Detail ASI (PSC) Extract	PH-0588-75	Quarterly	Detail data of officer positions to Officer Personnel Management Directorate
Detail ASI Retrieval	PG-0210-76	Semi-Annual	Used to validate requirements for specific skills in the Special and Management Program
Detail Chaplain PSC Report	PH-0890-76	Monthly	Used to assign chaplains by ASI and position description
Foreign Area Specialists	PG-0044-77	Quarterly	Used to determine the numbers of Foreign Area Officer (FAO) specialists needed to meet Army requirements
Chaplain MOS Extract TDA/MTOE	PH-0022-78	Quarterly	Used for analysis of requirements (COMPO 1, 2, and 3) for chaplains
Club Management Extract	PH-0051-78	Monthly	Provide data on club management positions in TDA and MTOE units
*TAADS Enlisted ASI Extract	PH-0345-78	Quarterly	Used by the Training Assignment Branch to validate training requests
TAADS CHF and PSC Extract	PH-0093-79	Monthly	Used to analyze requirements for officer and enlisted NBC specialist
MOS Standard Retrieval	None Assigned	As Requested	Used for analysis of requirements/authorizations for selected MOSs
Parent Unit Document	None Assigned	As Requested	Obtain a copy of an official approved Unit Authorization Document; primarily for distribution to satellited commands by DAMO-FDU
MOS/Duty Position Report	PH-0034-72	Semi-Annual	Used to determine/verify total TDA requirements for enlisted personnel by MOS, duty position, branch, and grade
*TAADS Monthly Changes to Chaplains	PH-0220-75	Monthly	Used to analyze changes in Active Army positions designated for chaplains
*Redstone Arsenal TAADS MOS Extract	PH-0530-75	Quarterly	Used by HQ US Army Missile Command to manage MOS 35H and 35B
Officer PSC Summary Report	PG-0096-76	Quarterly	Used to analyze officer personnel requirements by Position Specialty Code (PSC)
USAR Officer Branch and Grade Report	PG-0029-76	Semi-Annual	Used for determining ROTC input requirements
*TAADS Authorized Strength by Component	PG-0191-76	Monthly	Provides summary data on the authorized strength of the Active Army, Army Reserve, and Army National Guard
USAR Male/Female Interchangeable Report	PE-0193-76	Semi-Annual	Used to determine maximum number of positions in USAR units to which females can be assigned
Aviator Positions Recap OS and Below	PH-0313-76	Monthly	Used to determine total number of Active Army aviators that are required and authorized
JAG Officer/Warrant Extract	PH-0674-76	Quarterly	Used in the personnel management of JAG OFF/WO
ARNG Officers by Branch and Grade	PG-0021-77	Semi-Annual	Used to manage the Reserve Component Objective Force
USAR SSI and Grade Report	PG-0056-77	Quarterly	Used to manage the Reserve Component Objective Force
Commercial Design Vehicle Extract	PG-0001-72	Monthly	Provides information of commercial-design administrative motor vehicles (AMV) for use by DCSLOG Transportation Management Division
Military Design Vehicle Extract	PH-0608-72	Monthly	Provides information to DCSLOG Transportation Management Division on military design AMV
TDA Administrative Use Vehicles	PG-0022-74	Semi-Annual	Provides data concerning authorized administrative use vehicles in Active Army, USAR, and ARNG TDA units
TDA Tactical Vehicles	PG-0023-74	Semi-Annual	Provides data on authorized tactical vehicles in Active Army, USAR, and ARNG TDA units
*TAADS SSN/LIN Report	PH-0222-74	Quarterly	Provides data on commercial design vehicles by the US Army Tank Automotive Center
Aircraft/Aviator Retrieval	PH-0343-74	Quarterly	Provides information on required and authorized aircraft quantities and WO positions in Active Army units
*TAADS Aircraft Retrieval	PH-0377-76	Quarterly	Used to support World-Wide Aviation Logistics Conference

*Indicates that the word TAADS should be eliminated.

APPENDIX D

VFDMIS PLANNED IMPROVEMENTS

VFDMIS PLANNED IMPROVEMENTS

The Vertical Force Development Management Information System (VFDMIS), which is currently under development by the US Army Computer Systems Command (CSC), is the first force systems major upgrade effort since implementing the Force Accounting System (FAS) and The Army Authorization Documents System (TAADS). The VFDMIS concept encompasses a common force data base where all force files will be linked through data base technology in a computer environment and accessible by HQDA force and command managers, MACOM, and installations located in CONUS and overseas. The concept includes capabilities

1. Process both wartime and peacetime requirements and authorizations data for personnel, materiel, and funds.
2. Provide for initial mobilization and build-up data to include deployment and contingency planning data.
3. Provide for expansion to accommodate newly activated installations.
4. Provide asset and casualty and equipment combat loss data.
5. Provide information and data for management within manpower, budgeting, and force constraints.
6. Provide for readiness reporting data.

In implementing these capabilities, VFDMIS development will:

1. Support HQDA, MACOMs, and installations via interactive software and remote terminal equipment using state-of-the-art telecommunications.
2. Include MACOM-unique requirements.
3. Integrate HQDA and MACOM force development processing.
4. Establish controls to balance forces, manpower, and budget data.

5. Provide complete audit trails of actions affecting each unit--active, reserve, National Guard, and unmanned--to the extent practicable.
6. Provide accurate and timely data.
7. Perform on-line data value edits.
8. Provide data retrieval to all users.
9. Reduce requirements for field reports.
10. Provide MACOMs and installations more computer time by removing VFAS, VTAADS, ITAADS, and selected command-unique systems from field computers.
11. Maintain all edit files to ensure only current approved data values are processed.
12. Incorporate the SACS Information Gathering and Analysis System (SIGMA) logic.
13. Incorporate the Force Accounting Terminal System (FACTS) and Rapid Authorization Data Retrieval (RADAR) logic into one cohesive capability.
14. Incorporate the Force Systems Branch Remote Job Entry (FSB/RJE) logic.
15. Incorporate the Automatic Validation (AUTOVAL) logic as a means to generate data, reduce terminal operator input, and perform data value edits.
16. Incorporate the capability to view and compare various VFDMIS files.
17. Incorporate EDATE and documentation rules.
18. Incorporate TOE for MTOE development and edit purposes.

The VFDMIS will provide a great improvement in overall response time and authorization document development time for reaction to guidance and documentation of manpower allocation changes through the on-line real-time capability.

The VFDMIS, when completely developed and implemented, will be a state-of-the-art system; however, there will be requirements for SACS-type processing. A continuation of SACS-type processing will be needed to:

1. Freeze the force at a point in time.
2. Review outstanding resource command management accounts and other pending actions.
3. Select TOE detail in those cases where TAADS-type documentation does not exist.
4. Factor personnel requirements because of system lag time.
5. Assemble SRC detail for plus and minus organizations, in some cases.
6. Review for and correct negative personnel and equipment quantities.
7. Process BOIP and SHN against the personnel and equipment detail.
8. Perform record count and the improved PAAS- and BOIMARS-type audits.
9. Maintain a SACS-type data base for recurring and ad hoc reports and as a retrieval data base.
10. Maintain SACS history for a 7-year period.

In addition to the foregoing, SACS documentation requirements must be developed and maintained.